Panasonic®

Hi-Fi

Professional/Industrial Video

Model AG-7355-B -E

S-VHS 625 VHS PAL

Operating Instructions

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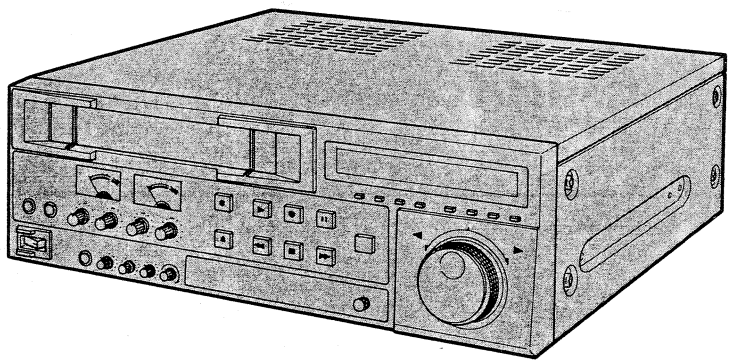


Before attempting to connect, operate or adjust this product, please read these instructions completely.

VQT4391

Introduction

Thank you very much for purchasing the AG-7355. This is a VTR which was developed for applications in industry, educational establishments and studios.

Amorphous heads and high quality picture

Picture quality has been improved by the use of the S-VHS system and the amorphous heads. Resolution of over 400 lines and less noise are realized in the following condition.

- FM carrier frequency: White peak; 7 MHz
  Sync tip; 5.4 MHz
- Installation of sub-emphasis circuit
- White clip level: 210%
- Use of S-VHS tape

Highly dependable mechanisms

- GT4W Head System enables double fine slow motion.
- The data in the counter memory can be backed up in the event of a power failure for about 48 hours.
- As for the full loading system, playback operation starts instantly from stop mode after the button is pressed.

Full range of options for system expansion

- Remote control is available using the optional remote search controller AG-A600 (34P).
- The optional Interface Adaptor allows control capability by RS-232C remote control. For details, contact your local dealer.

Note

The digital still playback function cannot be controlled from the 34P remote connector on this unit. Be sure to use the optional RS-232C Interface Adaptor (AG-IA232TC).

Precautions for Use

IMPORTANT
"Unauthorized recording of copyrighted television programmes, films, video tapes and other materials may infringe the right of copyright owners and be contrary to copyright laws."

■ **THIS APPARATUS MUST BE EARTHED.**
To ensure safe operation the three-pin lead supplied (not for U.K. model) must be connected only into a standard three-pin power point which is effectively earthed through the normal household wiring.
Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities.
The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.

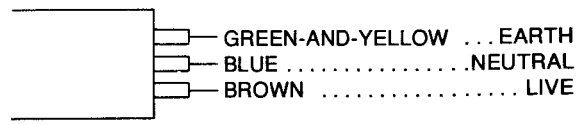
■ **DO NOT REMOVE PANEL COVER BY UNSCREWING.**
To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

■ If the unit is not going to be used for length of time, turn the power OFF and disconnect the power plug from the AC outlet.

WARNING:
TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

■ **AC POWER CORD CONNECTION (U.K.model only)**
The wires in the mains lead for this apparatus are coloured in accordance with the following code.

Important



Mains Lead

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW.
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured red.

CAUTION:
TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

Remark:
This apparatus was produced to BS 800.
Dieses Modell entspricht der EG-Vorschrift(für Funkstörungsschutz) 87/308/EWG.
La Société PANASONIC-FRANCE, importateur du matériel MATSUSHITA-JAPON déclare que cet appareil est conforme aux prescriptions de la directive 76/889/C.E.E. modifiée par la directive 87/308/C.E.E.
Dit model is onderworpen aan de EEG-richtlijn (ter voorkoming van radio-interferentie) 87/308/EEG.
Denne model opfylder EF direktiv 87/308/EF (for forebyggelse af radiointerferens).
La Società PANASONIC ITALIA S.p.A., importatrice di questo prodotto, dichiara che questo apparecchio è conforme alle disposizioni della direttiva C.E.E./87/308 (D.M. 13.4.1989).
Este modelo cumple con la norma EC (para interferencias de radio 87/308/EEC).

is the safety information.

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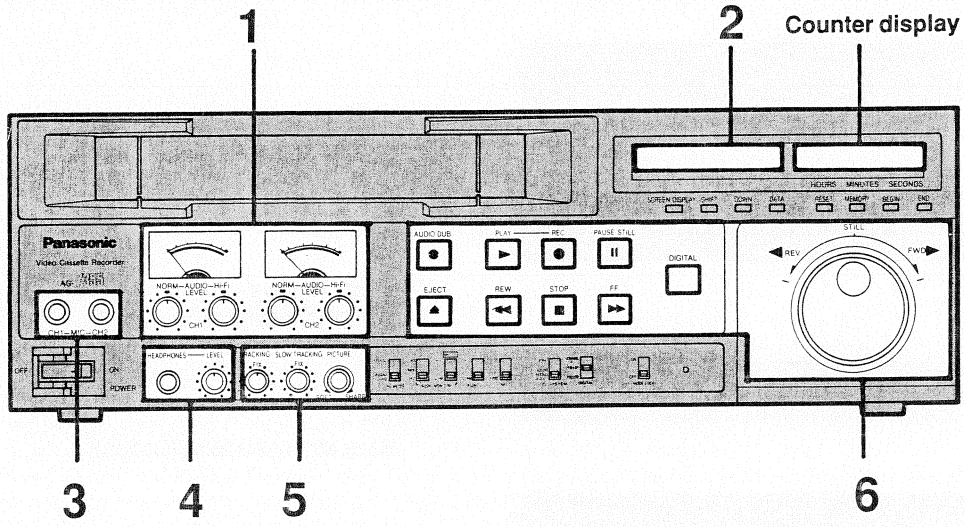
Front Panel Parts



1. Level control area

Audio (CH1) level meter ..... Displays CH1 audio level.
Audio (CH2) level meter ..... Displays CH2 audio level or tracking level.
Audio (CH1) NORMAL LEVEL control ..... Adjusts recording level for normal audio CH1.
Audio (CH1) Hi-Fi LEVEL control ..... Adjusts recording level for Hi-Fi audio CH1.
Audio (CH2) NORMAL LEVEL control ..... Adjusts recording level for normal audio CH2.
Audio (CH2) Hi-Fi LEVEL control ..... Adjusts recording level for Hi-Fi audio CH2.

2 Function display lamp area

Cassette "IN" lamp (⊙⊙) ..... Lights when a cassette is inserted.
S-VHS lamp (S-VHS) ..... Lights in S-VHS mode.
Hi-Fi lamp ..... Lights when Hi-Fi sound is recorded or played back.
DOLBY* NR lamp ..... Lights when Dolby NR system is used.
One-time playback lamp (⮌) ..... Lights in one-time repeated playback mode.
Memory stop lamp (➡000) ..... Lights in counter (0:00:00) stop mode.
Continuous playback lamp (⟲) ..... Lights in continuous repeated playback mode.

*** Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.**
*** "DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.**

3. Microphone area

MIC jacks (CH1/CH2) ..... Connects 1/4" external microphone.

4. Headphone area

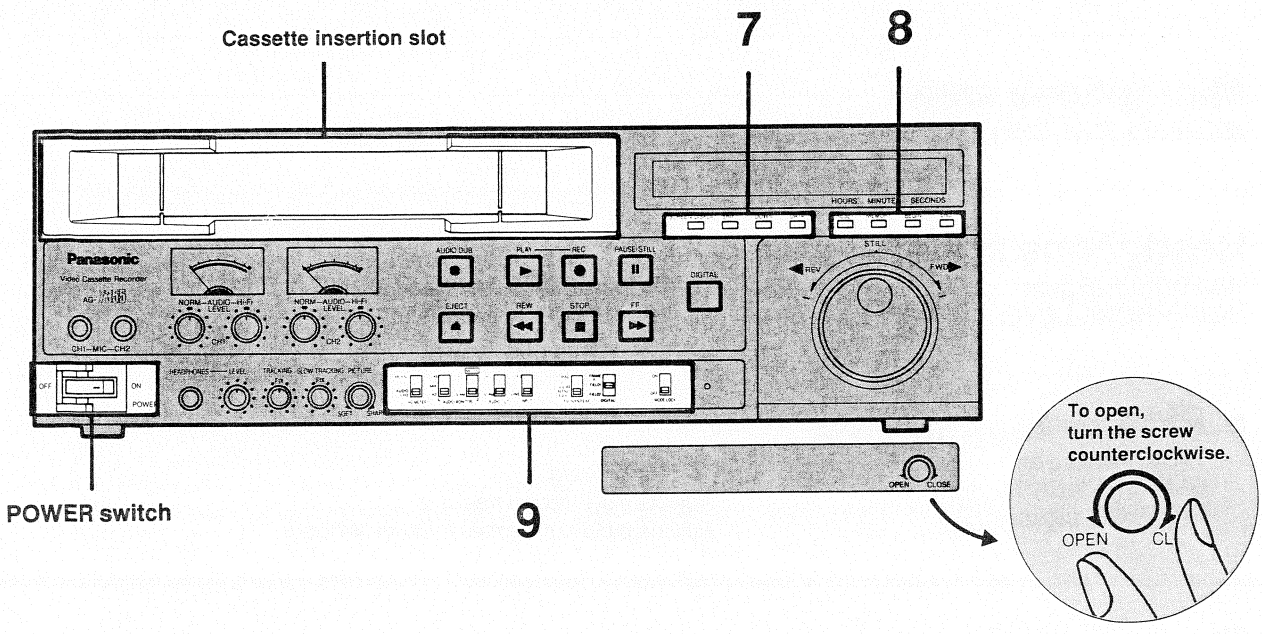
HEADPHONE jack ..... Connects 1/4" stereo headphones.
HEADPHONE LEVEL control ..... Adjusts headphones volume.

5. Picture adjusting area

TRACKING control ..... Adjusts tracking.
SLOW TRACKING control ..... Adjusts slow motion tracking.
PICTURE adjusting knob ..... Adjusts picture sharpness during playback.

6. Basic operation area

AUDIO DUB button ..... Starts audio dubbing when used together with PLAY button during playback.
PLAY button ..... Starts playback.
REC button ..... Starts recording when used together with PLAY button.
PAUSE/STILL button ..... Establishes still-picture mode during playback and pause mode during recording.
EJECT button ..... For ejecting the cassette.
REW button ..... Rewinds the tape.
STOP button ..... Stops all operations.
FF button ..... Fast forwards the tape.
DIGITAL button ..... Executes digital still playback.
Search/JOG dial ..... Adjusts search speed.



7. Menu setting area

SCREEN DISPLAY button ..... Displays initial setting menu on the screen.
SHIFT button ..... Changes the menu pages and shifts the flashing of the indicator rightward.
DOWN button ..... Shifts the flashing of the line indicator downward.
DATA button ..... Inputs the digit data and selects the data.

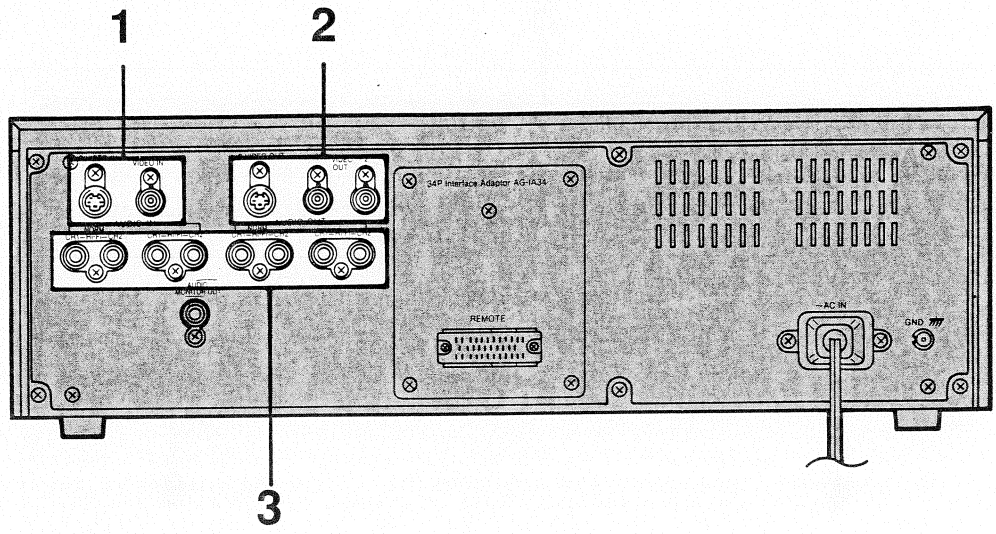
8. Function setting area

RESET button ..... Resets the tape counter.
MEMORY button ..... Sets the memory auto stop and selects the repeat mode.
BEGIN button ..... Sets the repeat beginning point.
END button ..... Sets the repeat ending point.

9 Function setting area

CH2 METER selector ..... Selects between Audio CH2 Level Meter and Tracking Meter for Audio (CH2) level meter.
AUDIO MONITOR meter selectors ..... Selects type of sound and channel to be monitored.
AUDIO OUT selector ..... Selects type of sound to be output from Audio Output Jacks.
INPUT signal selector ..... Selects video input signal.
DIGITAL selector ..... Selects frame or field in the digital still-picture mode.
MODE LOCK selector ..... Inhibits function of the front panel buttons.
TV SYSTEM selector ..... Selects the 3 VHS system, PAL, CCIR and NTSC 4.43.

Rear Panel Parts



1. Video input signal area

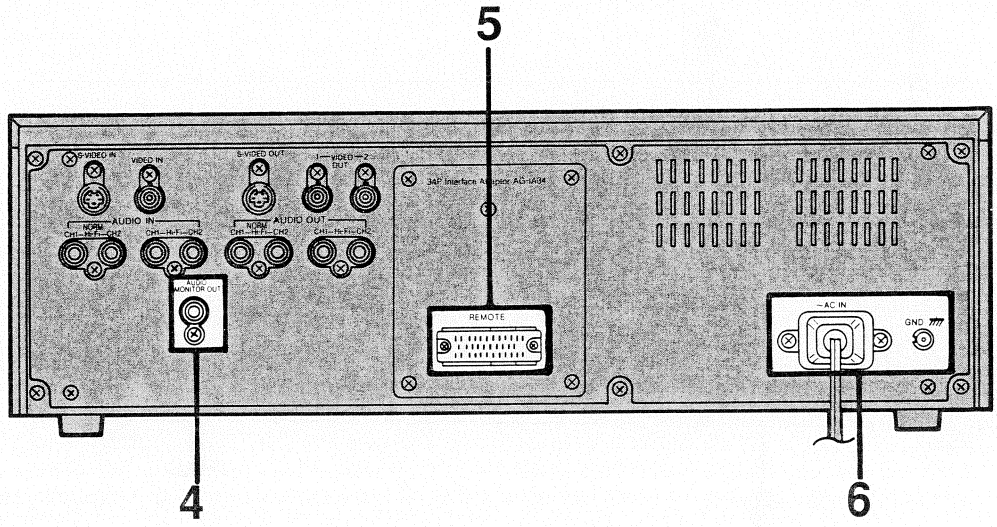
S-VIDEO IN connector ..... S-VIDEO signal input connector.
VIDEO IN connector ..... Video signal input connector.

2. Video output signal area

S-VIDEO OUT connector ..... S-VIDEO signal output connector.
VIDEO OUT (1, 2) connectors ..... Video signal output connectors.

3. Audio signal area

NORM/Hi-Fi audio input connectors ..... NORM/Hi-Fi audio (CH1/2) input connectors.
Hi-Fi audio input connectors ..... Input connectors for Hi-Fi sound only.
NORM/Hi-Fi audio output connectors ..... NORM/Hi-Fi audio (CH1/2) output connectors.
Hi-Fi audio output connectors ..... Input connectors for Hi-Fi sound only.



4. Monitor output area

AUDIO MONITOR OUT connector ..... Audio monitor signal output connector.

5. Remote signal area

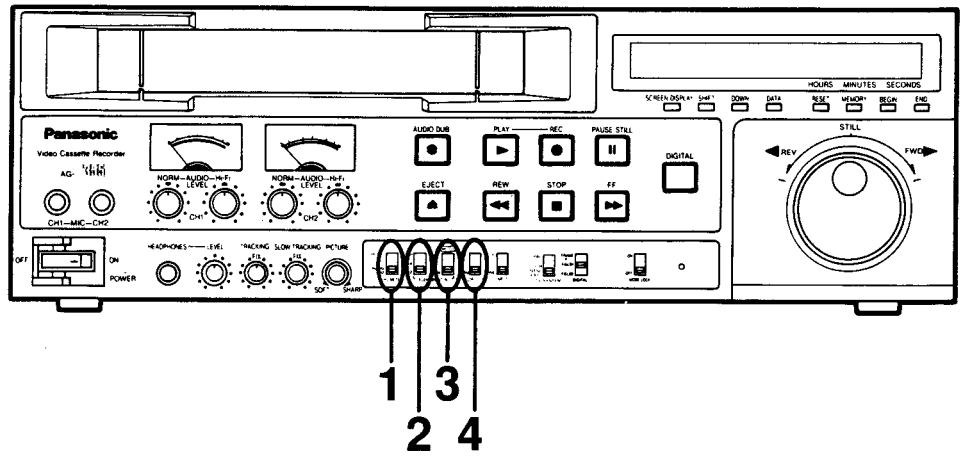
REMOTE connector ..... Connector for remote search controller (AG-A600).

6. Power supply circuit area

AC IN socket ..... Connected to AC 120-240V power outlet.

GND terminal ..... When connecting this unit to any other component, make absolutely sure that it is properly grounded by connecting this terminal.

Setting the Switches



1. CH2 METER Selector

Used to adjust the audio (CH2) input level during recording. Set this selector to "AUDIO CH2" before making adjustment for the recording level of audio channel 2.

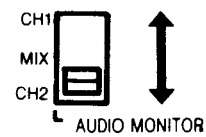
2. AUDIO MONITOR Selector

Used to select the audio channel which is to be heard on the TV monitor or headphones through the HEADPHONE Jack on the front panel or the AUDIO MONITOR OUT connector on the rear panel of the unit.

CH1: To monitor the audio signal from channel 1.

MIX: To monitor the mixed audio signals from channels 1 and 2 through the AUDIO MONITOR OUT connector or HEADPHONES Jack. When using headphones, audio channels 1 (left) and 2 (right) can be monitored separately.

CH2: To monitor the audio signal channel 2.

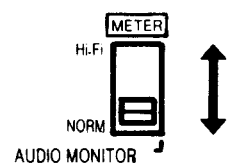


3. METER Selector

Used to display the recording level of Hi-Fi audio or normal audio on the LEVEL meter and select the audio output signal from the HEADPHONES Jack on the front panel or the AUDIO MONITOR OUT connector on the rear panel.

Hi-Fi: Selects Hi-Fi audio.

NORM: Selects normal audio.

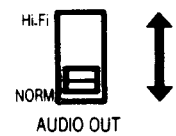


4. AUDIO OUT Selector

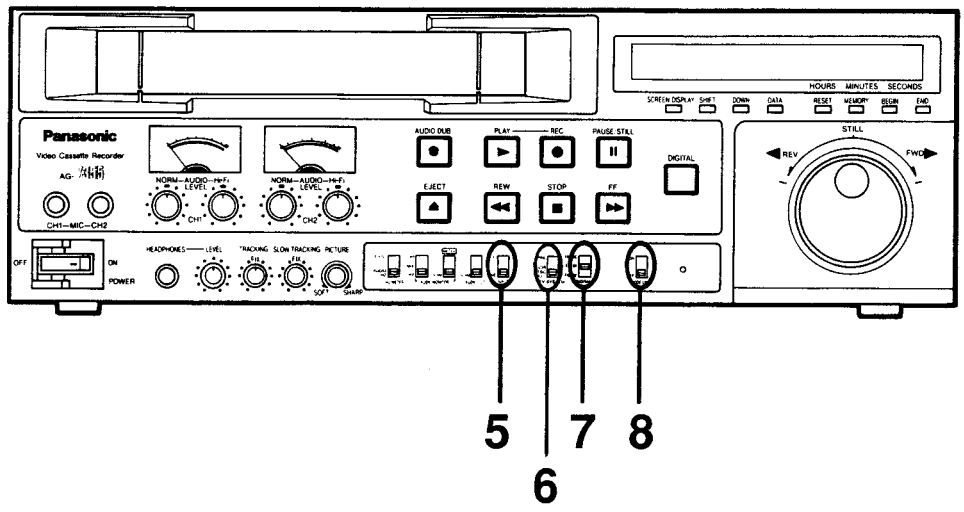
Used to select the audio output signal from the NORM/Hi-Fi audio output connectors on the rear panel.

Hi-Fi: Discriminates between Hi-Fi and normal audio automatically. When there is no Hi-Fi audio output signal, normal audio will be automatically outputted.

NORM: Normal audio is outputted.



Setting the Switches (cont.)

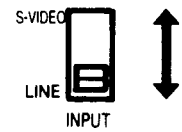


5. INPUT Signal Selector

Used to select video input signal to be recorded.

S-VIDEO: To record video signal through the S-VIDEO IN Connector

LINE: To record video signal through the VIDEO IN Connector.



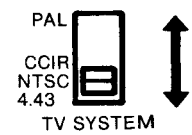
6. TV SYSTEM Selector

Used to select the 3 VHS system.

PAL: To playback or record by PAL system.

CCIR: To playback or record by CCIR system. (S-VHS recording can not be made.)

NTSC 4.43: To playback tapes recorded by NTSC system. (Recording cannot be performed.)



- PAL and CCIR sytems can not be distinguished automatically.
- If REC and PLAY Buttons are pressed simultaneously when this selector is set to "NTSC 4.43", the unit will automatically go into playback mode.

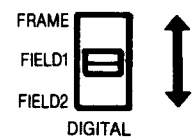
7. Digital Selector

Used to select frame or field in the digital still-picture mode.

FRAME: For digital still playback of frame video signals.

FIELD1: For digital still playback of field 1 video signals.

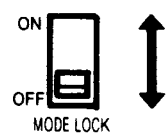
FIELD2: For digital still playback of field 2 video signals.



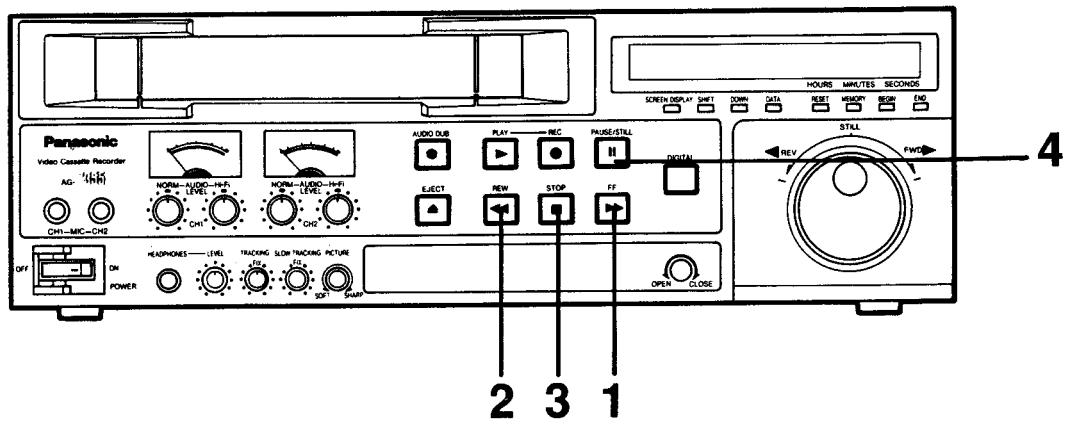
8. MODE LOCK Selector

ON: To operate the unit with a remote controller. When this switch is set to this position, the operation buttons on the front panel of the unit will be rendered inoperative.

OFF: When this switch is set to this position, the operation buttons on the front panel are operative and the unit can also be controlled with the remote controller.



FF, REW, Stop and Pause/Still



1. Fast forwarding the tape

Press the FF button.

2. Rewinding the tape

Press the REW button.

3. Stopping the tape

Press the STOP button.

- The STOP button lights and all operations are stopped.

4. Pause

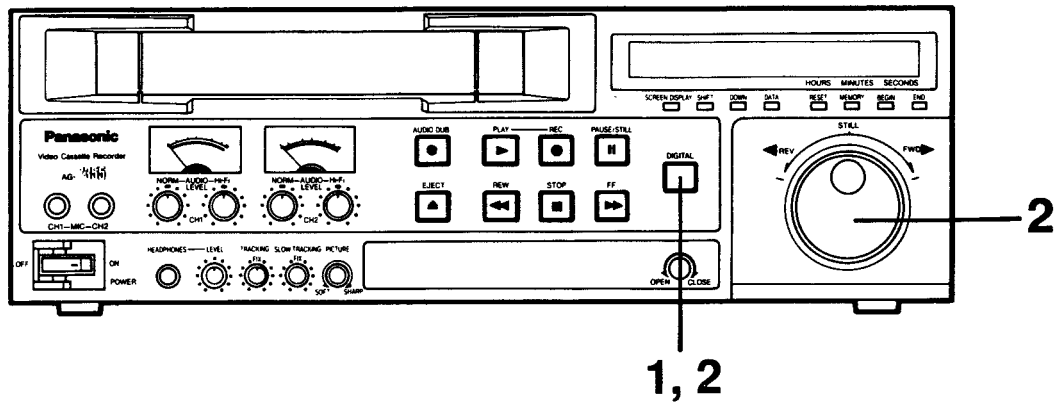
Press the PAUSE/STILL button during recording or playback.

- During playback, the unit is placed in the PLAY/STILL mode and still pictures are played back.
- During recording, the unit is placed in the REC/PAUSE mode and recording is temporarily suspended.

Notes

- If PAUSE/STILL mode continues for more than about 5 minutes, the unit will automatically go into the stop mode to prevent the tape from damage.
- If STOP mode continues for more than about 5 minutes, the cylinder will automatically stop to prevent the tape from damage.

Digital Still Playback

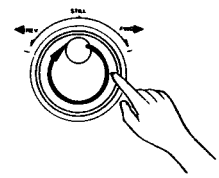


1. To establish digital still playback during playback mode

■ Press the DIGITAL button during playback.
The DIGITAL button lamp lights and the digital still-picture mode is established.

2. To establish digital still playback during pause mode

[1] Use the JOG function to search for the scene to be viewed in the digital memory.

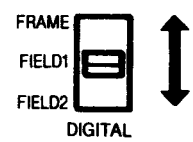


[2] Press the DIGITAL button at the desired scene.

■ The VTR moves the tape in the reverse direction for about 1 second and then plays it back so that the scene in question can be viewed as a digital still-picture.

MEMO

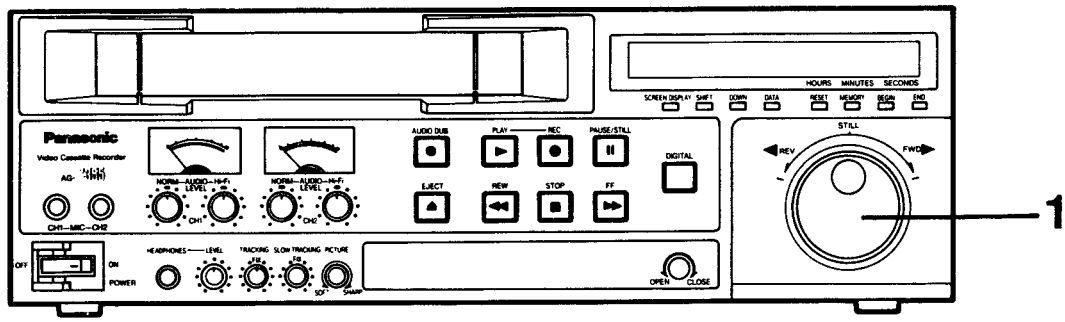
■ The frame/field 1/field 2 video signals can be selected by setting the DIGITAL selector.



Notes

- If noise should appear on the screen, the VTR will not operate normally when it is set to the digital still-picture mode.
- If colour video signals are recorded in either field 1 or field 2 and then black-and-white video signals are recorded in the other field, the pictures in both field 1 and field 2 will appear in black and white. If, on the other hand, black-and-white and video signals are recorded first and then colour signals are recorded later, noise will appear with the black-and-white video signals.
- This unit does not accept copy guard signals.
- This function cannot be controlled from the 34P remote connector. It can be controlled, however, by using the optional RS-232C Interface Adaptor (AG-IA232TC).
- You cannot obtain a digital still picture using a tape that has been recorded in the NTSC or CCIR format.

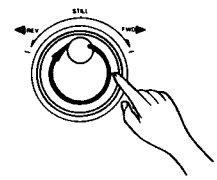
Search Operations



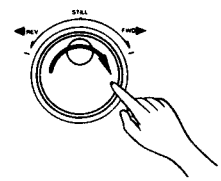
1. Operate the SEARCH/JOG Dial.

The inner part dial is JOG mode while the outer part dial is SHUTTLE mode.

- When the SEARCH/JOG Dial is rotated clockwise, the tape will be played back in the forward direction (the FWD indicator appears). When it is rotated counterclockwise, the tape will be played back in the reverse direction (the REV indicator appears).



[1] JOG mode (SHUTTLE mode dial at centre position.)
In response to the speed at which the inner part dial is turned, the tape can be played back at a speed ranging from still picture to ±1× normal tape speed.
When the turning is stopped, a still picture is always produced.

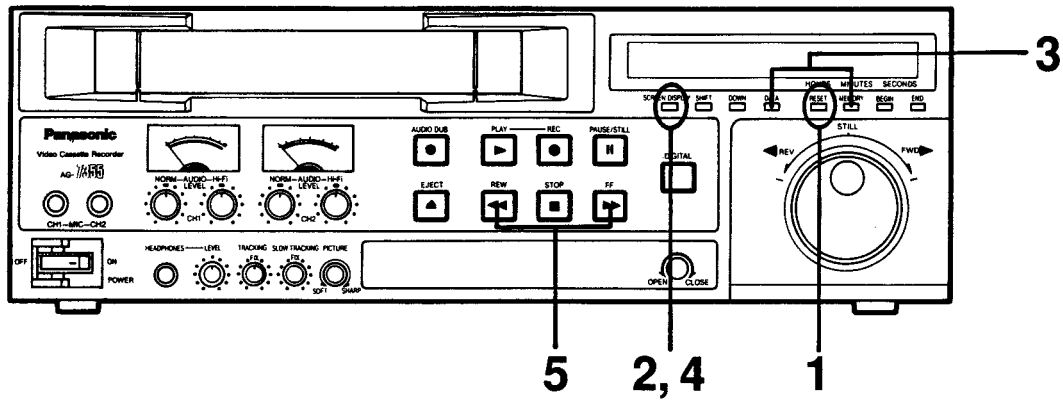


[2] SHUTTLE mode
When the outer part dial is rotated in the SHUTTLE mode, the tape speed will be changed depending on the position of the SEARCH/JOG Dial. The tape speed can be changed from 0 (ie, STILL playback) to 9 times the normal tape speed.
The still picture is obtained when the SEARCH/JOG Dial is set to the centre fix position (click-stop).

Note

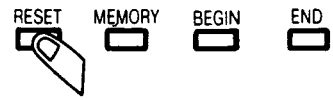
- The VTR is always set to the direct search mode. Turn the outer search dial in order to set it to the search mode.

MEMORY STOP Function



1. Press the RESET Button at the point to be automatically stopped.

■ The tape counter will be reset to "0:00:00".



2. Press the SCREEN DISPLAY Button.

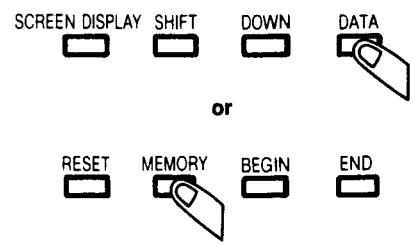
■ The ON-SCREEN menu will be displayed on the TV monitor.

3. Press the DATA or MEMORY Button.

■ Select the "MEMORY STOP" mode.

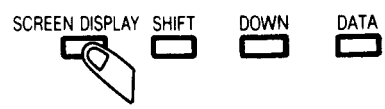
MEMORY STOP
BGN+0 : 00 : 00
END+0 : 00 : 00

("→000" lamp lights up in the counter.)



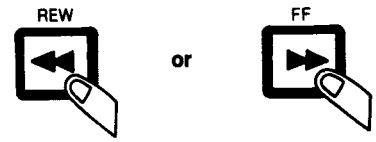
4. Press the SCREEN DISPLAY Button.

■ The normal picture will appear.



5. Press the FF or REW Button.

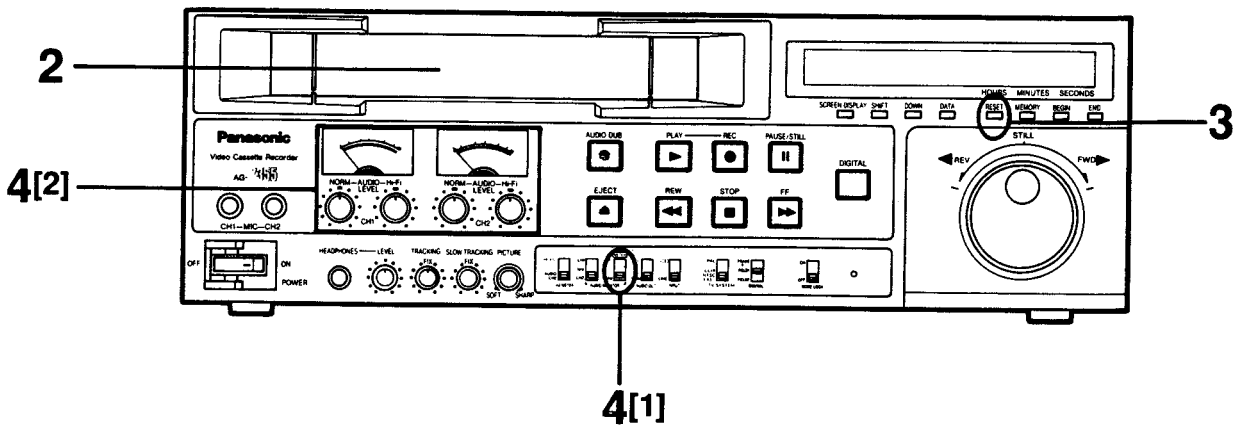
■ When the FF or REW Button is pressed, the tape will be wound and then stopped automatically around the tape counter position "0:00:00".



Notes

- MEMORY STOP function is also available by just pressing the MEMORY Button at the position except "0:00:00"after step 1 described above.
- When finished with this function, be sure to select "MEMORY OFF" at step 3 described above.("→000" lamp goes off in the counter.)

Recording

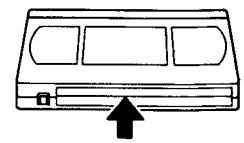


1. Set the selectors.

INPUT Selector → "LINE" or "S-VIDEO" (Refer to page 12.)
TV SYSTEM Selector → "PAL" or "CCIR" (Refer to page 12.)
S-VHS (ON-SCREEN) → "ON" (Refer to pages 29 to 31.)

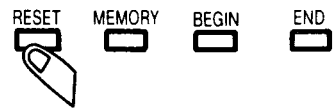
2. Insert the video cassette.

■ Make sure that the erasure prevention tab on the video cassette is intact.



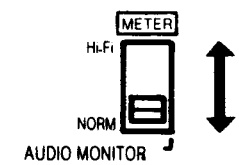
3. Press the RESET Button.

■ The tape counter will be cleared.

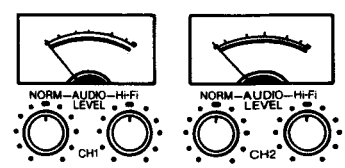


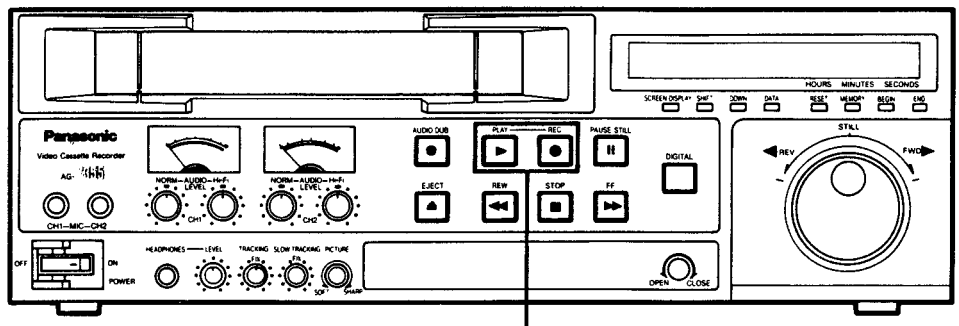
4. Adjust the audio recording level.

[1] Select Hi-Fi audio or normal audio to be adjusted with the METER Selector.
HI-FI: Hi-Fi audio recording level is displayed on the LEVEL meter.
NORM: Normal audio recording level is displayed.



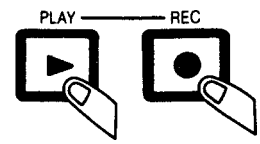
[2] Level adjustment
Adjust the recording level of Hi-Fi audio or normal audio by rotating the audio level controls (CH1 and CH2) until the LEVEL meters point their maximum positions below "0".





5. Press the REC and PLAY Buttons together.

■ Recording will start.



Notes

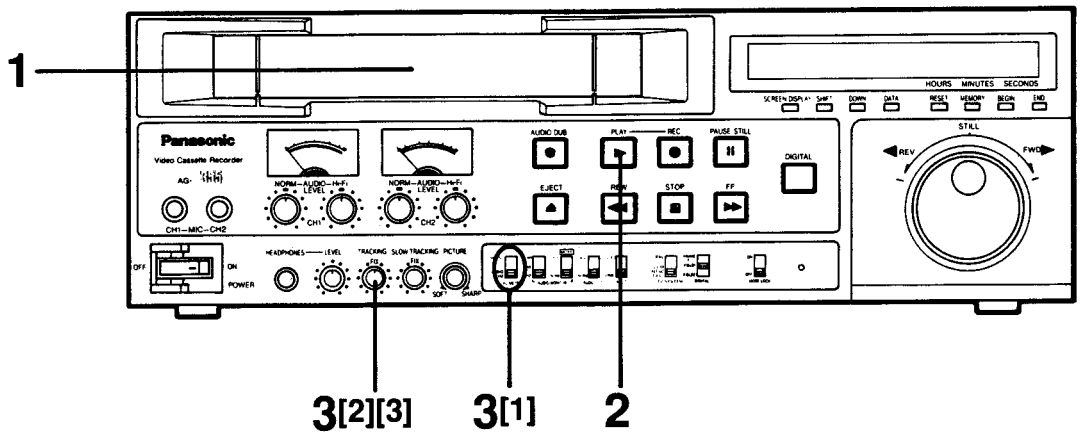
■ The DOLBY NR system's initial setting can be selected in the ON-SCREEN mode.
  • The DOLBY NR system permits audio recording and playback with less noise.

■ Set the "HI-FI REC" mode in the initial setting menu on the TV monitor (ON-SCREEN) to "ON" to perform Hi-Fi audio recording.

■ If Hi-Fi audio recording is not intended, be sure to not only set the LEVEL meter to "0", but also the "HI-FI REC" mode of the ON-SCREEN to "OFF".

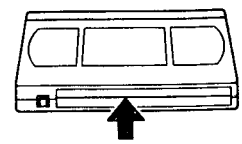
■ Recording in NTSC system cannot be performed. Recording can only be performed in PAL or CCIR system.

Playback



1. Insert the video cassette.

- Insert the tape with the recorded sound and pictures which are to be played back.



2. Press the PLAY Button.

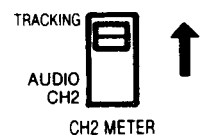
- Playback will start.

3. Adjust the Tracking.

[1] Set the CH2 METER Selector to "TRACKING".

[2] Slowly rotate the TRACKING Control clockwise or counter-clockwise so that the meter deflection is maximized.

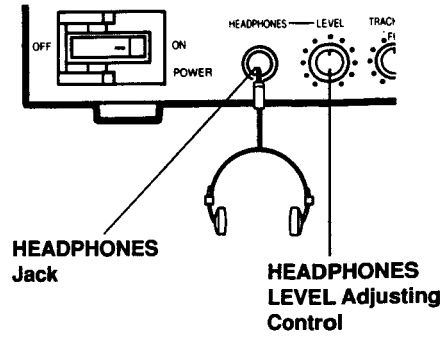
[3] Return the TRACKING Control to its center "FIX" position after playback is finished.



- TRACKING should be readjusted when playing back tapes recorded on another VTR.

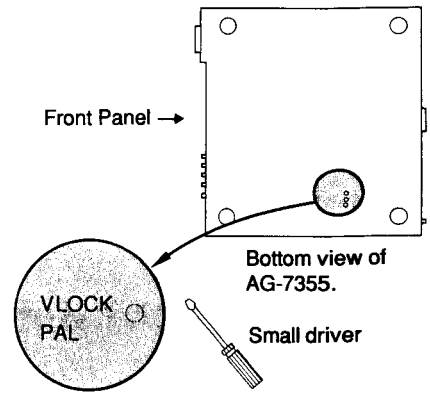
When using the headphones

If a high-impedance headphones is used, the volume level may be variable.



Vertical Lock Adjustment

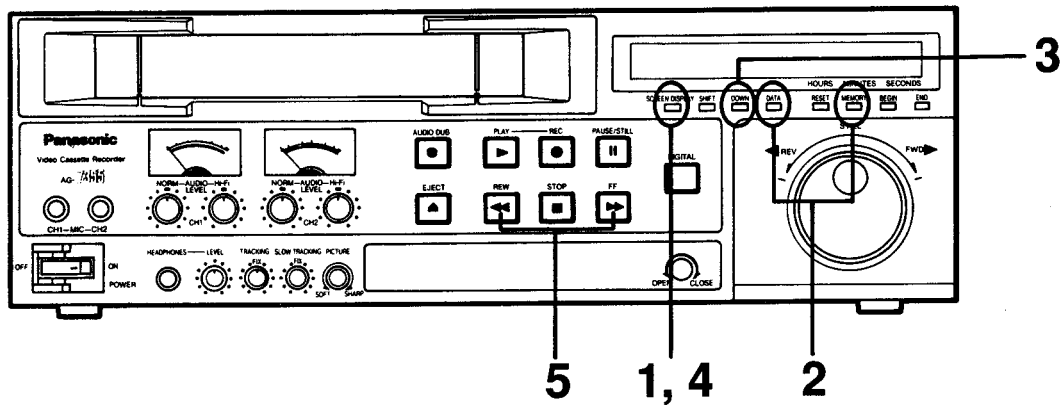
If picture jitters vertically in STILL, adjust the V-Lock Control (at the Bottom Panel), but a one time adjustment should be necessary.



Notes

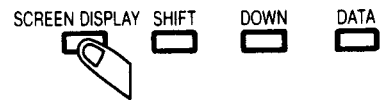
- Set the "DOLBY NR" mode in the ON-SCREEN (initial setting) menu to "ON" to playback a tape recorded in the Dolby NR system. (Refer to pages 29 to 31.)
- If TRACKING is not adjusted properly for playback, Hi-Fi audio recorded onto the tape will not be reproduced and the Hi-Fi lamp will not be displayed.
- Tapes recorded in NTSC S-VHS and NTSC EP cannot be played back.

Repeat Playback



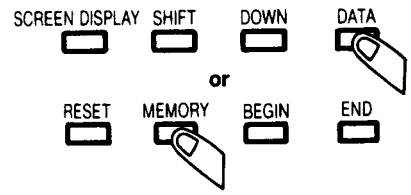
1. Press the SCREEN DISPLAY Button.

- The ON-SCREEN menu will be displayed on the TV monitor.



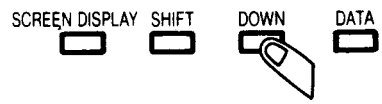
2. Press the DATA or MEMORY Button.

- Select the repeating mode (one-time or continuous repeated playback mode).
  The " ⇄ " or " ↻ " mark will appear on the tape counter.



3. Press the DOWN Button.

- Press the SHIFT and DATA Buttons to locate the beginning and end points of section you wish to perform REPEAT playback.

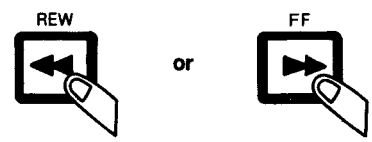


4. Press the SCREEN DISPLAY Button.

- The normal screen will appear.

5. Press the FF or REW Button.

- When the tape reaches the beginning (BGN) points, REPEAT playback will start automatically.

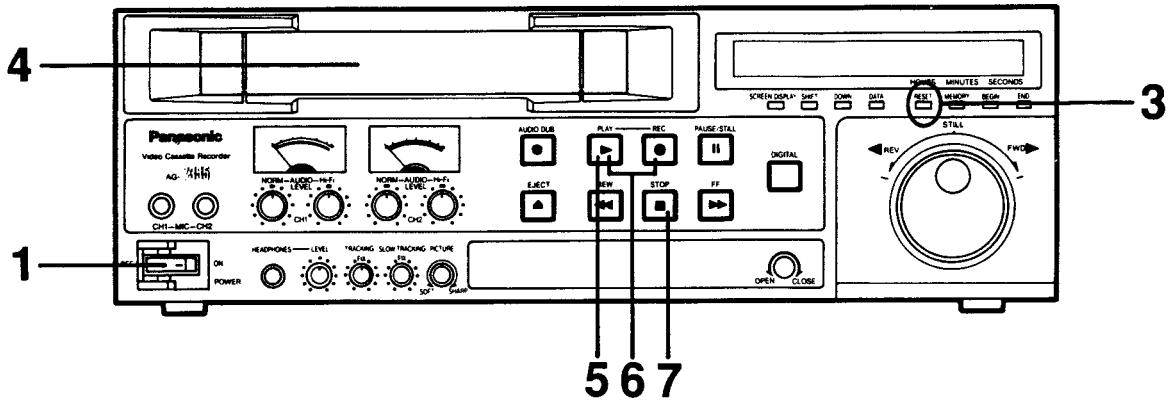


Notes

- When same data is input for BGN and END, repeat playback is performed from the tape beginning to the end.
- When the data for END has exceeded the tape end, repeat palyback is performed from the BGN position to the tape end.
- When the data for BGN is smaller than the tape beginning, repeat playback is performed from the tape beginning to the END position.

Dubbing

Dubbing with S-VIDEO Connector



1. Turn on both of the player and recorder VTRs.

2. Set the selectors.

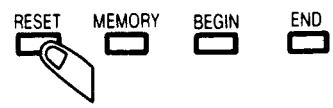
Recorder side

INPUT Selector → "S-VIDEO" (Refer to page 12.)
ON-SCREEN (MEMORY) → "MEMORY OFF" (Refer to pages 27 to 28.)

Player side

ON-SCREEN (MEMORY) → "MEMORY OFF" (Refer to pages 27 to 28.)
EDIT Selector
(ON-SCREEN) → "ON" (Refer to pages 29 to 31.)

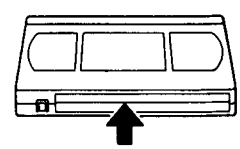
3. Press the RESET Button to reset the tape counter to "0:00:00".



4. Insert video cassettes.

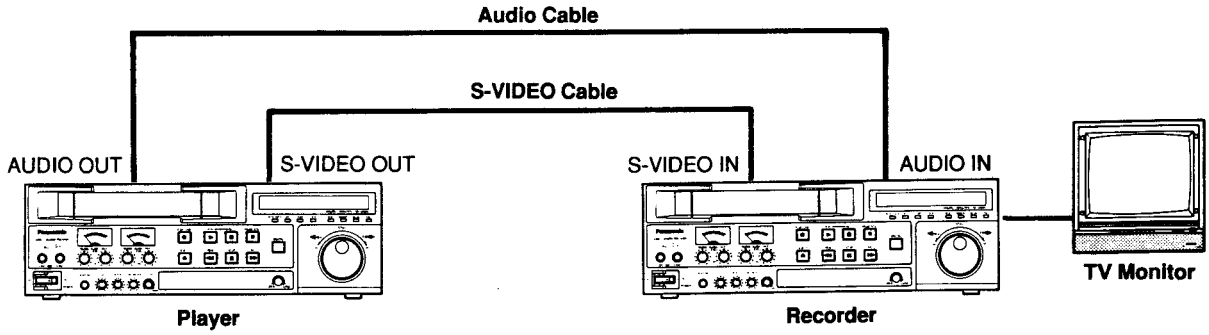
Insert a recorded video cassette in the player and a blank video cassette in the recorder.

- Make sure that the erasure prevention tab on the recorder video cassette is intact.

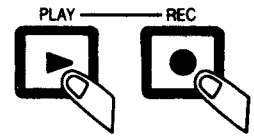


5. Press the PLAY Button on the player.

Connections



6. Press the REC and PLAY Buttons together on the recorder at the tape position to start dubbing.



7. Press the STOP Button to stop the dubbing.

MEMO

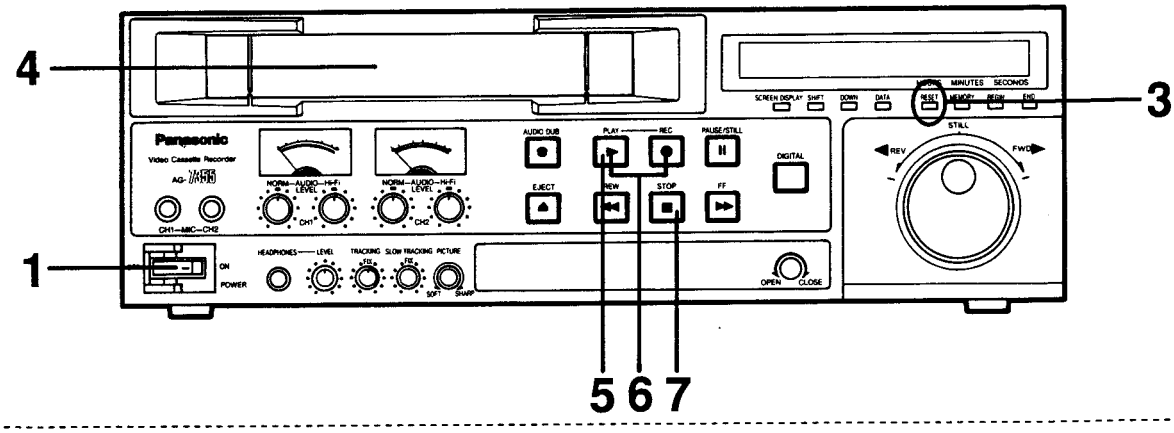
- The SEARCH/JOG Dial is convenient to locate the tape segment to be dubbed. Follow the steps instructed below.
  1) Make the search speed constant by using the SEARCH/JOG Dial.
  2) Press the PAUSE/STILL Button to activate the STILL mode.
  3) If you wish to inch (move slightly) the tape in the forward or reverse direction, press the PAUSE/STILL Button again to release the STILL mode.
  4) Repeat steps 1)~3) until the desired segment is located.

Note

- Be sure to return the "EDIT" ON-SCREEN (initial setting) on the player VTR to "OFF" after dubbing is finished. (Refer to pages 29 to 31.)

Dubbing (CONT'D)

Dubbing with Composite (VIDEO IN/OUT) Connector



1. Turn on both of the player and recorder.

2. Set the selectors.

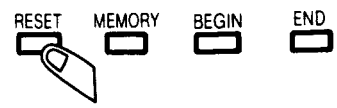
Recorder side

INPUT Selector → "LINE" (Refer to page 12.)
ON-SCREEN (MEMORY) → "MEMORY OFF" (Refer to pages 27 to 28.)

Player side

ON-SCREEN (MEMORY) → "MEMORY OFF" (Refer to pages 27 to 28.)
EDIT (ON-SCREEN) → "ON" (Refer to pages 29 to 31.)

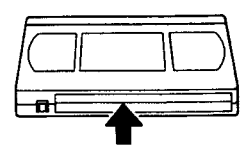
3. Press the RESET Button to reset the tape counter to "0:00:00".



4. Insert video cassettes.

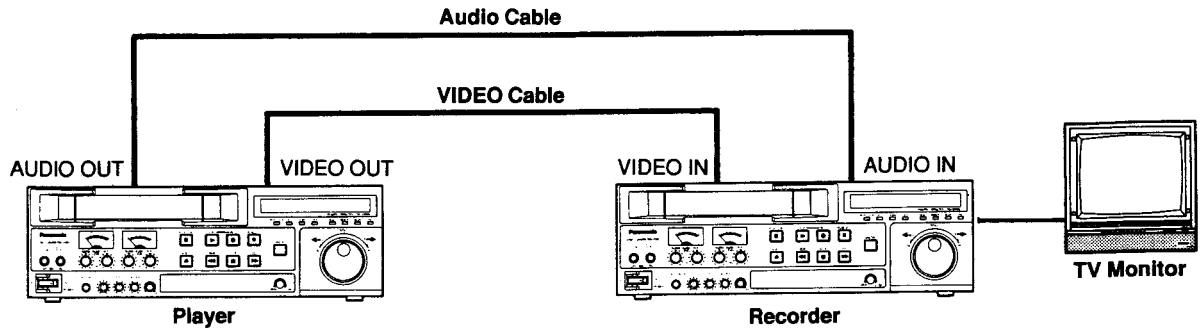
Insert a recorded video cassette in the player and a blank video cassette in the recorder.

- Make sure that the erasure prevention tab on the recorder video cassette is intact.

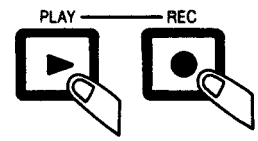


5. Press the PLAY Button on the player.

Connections



6. Press the REC and PLAY Buttons together on the recorder at the tape position to start dubbing.



7. Press the STOP Button to stop the dubbing.

MEMO

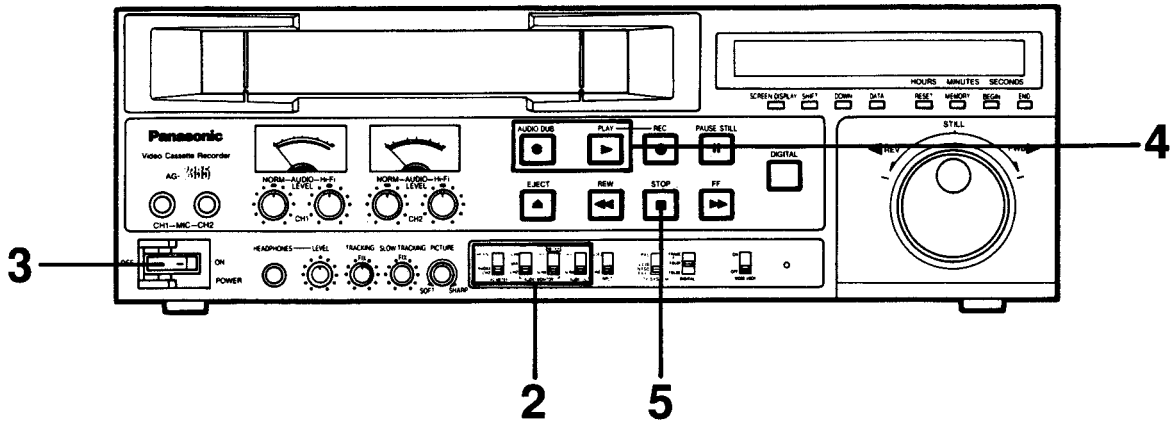
- The SEARCH/JOG Dial is convenient to locate the tape segment to be dubbed. Follow the steps instructed below.

1) Make the search speed constant by using the SEARCH/JOG Dial.
2) Press the PAUSE/STILL Button to activate the STILL mode.
3) If you wish to inch (move slightly) the tape in the forward or reverse direction, press the PAUSE/STILL Button again to release the STILL mode.
4) Repeat steps 1)~3) until the desired segment is located.

Note

- Be sure to return the "EDIT" ON-SCREEN (initial setting) on the player VTR to "OFF" after dubbing is finished. (Refer to pages 29 to 31.)

Audio Dubbing



1. Set the selectors.

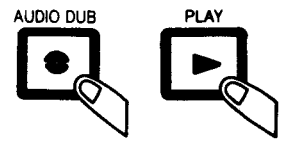
INPUT Selector → "LINE" (Refer to page 12.)
AUDIO DUB (ON-SCREEN) → "CH1" or "CH2" (Refer to pages 29 to 31.)
ON-SCREEN (MEMORY) → "MEMORY OFF" (Refer to pages 27 to 28.)

2. Make necessary settings of audio switches.

Refer to page 11.

3. Press the AUDIO DUB and PLAY Buttons together.

■ Audio dubbing will start.



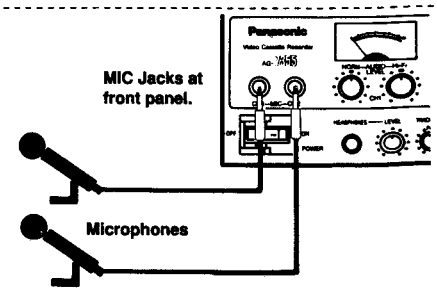
4. Press the STOP Button to stop audio dubbing.

MEMO

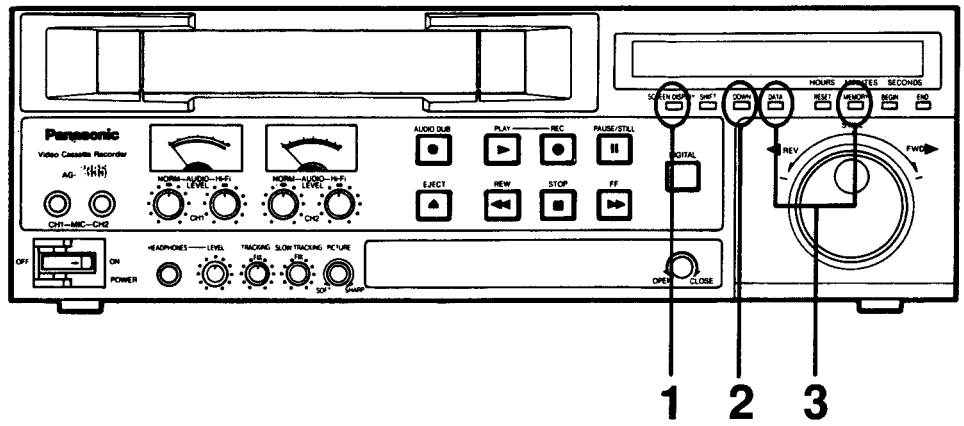
■ The SEARCH/JOG Dial is convenient to locate the tape segment to be dubbed. Follow the steps instructed below.
1) Make the search speed constant by using the SEARCH/JOG Dial.
2) Press the PAUSE/STILL Button to activate the STILL mode.
3) If you wish to inch (move slightly) the tape in the forward or reverse direction, press the PAUSE/STILL Button again to release the STILL mode.
4) Repeat steps 1)~3) until the desired segment is located.

Notes

■ If the microphone and audio cables are connected at the same time, only microphone sound will be recorded.
■ Hi-Fi effect cannot be obtained by audio dubbing.

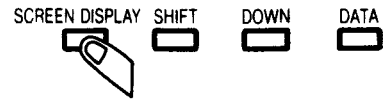


ON-SCREEN (Memory Setting)



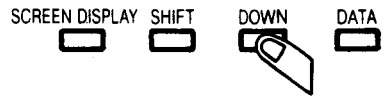
1. Press the SCREEN DISPLAY Button.

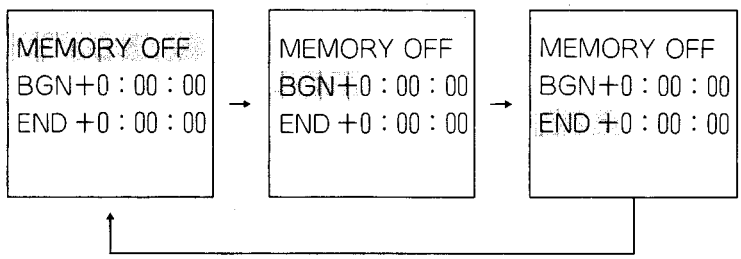
■ The unit goes into the ON-SCREEN mode and the MEMORY setting menu will display on the screen.



2. Press the DOWN Button.

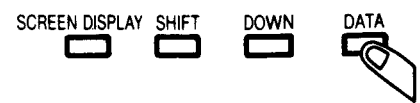
■ The "MEMORY" indication line will flash. Each time the DOWN Button is pressed, the flashing indication will be shifted to "BGN" → "END" → "MEMORY" line.



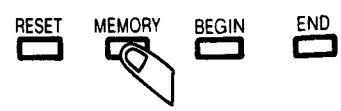


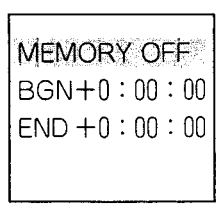
3. Press the DATA or MEMORY Button.

■ Select the desired mode while the "MEMORY" indication line is highlighted.

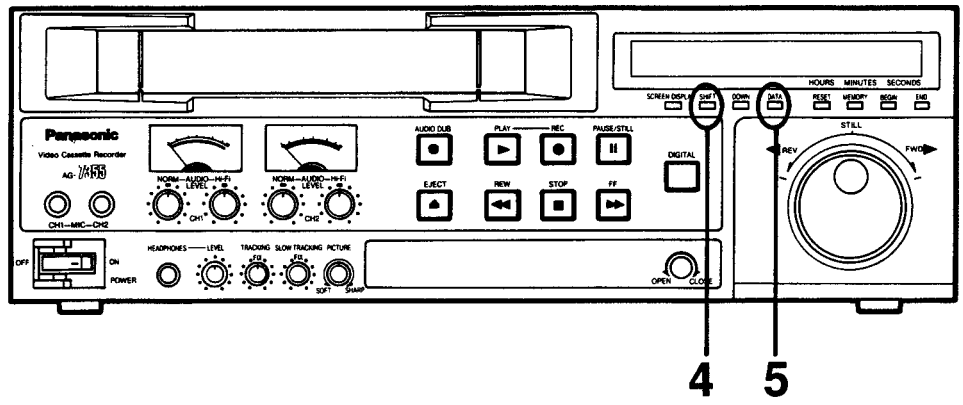


or





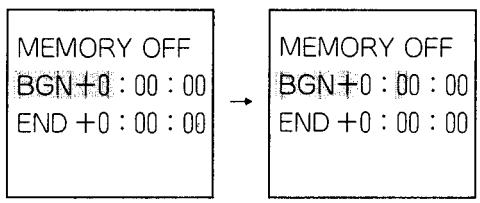
"MEMORY OFF" (No indication) → "MEMORY STOP" (➡000) → "REPEAT 1 TIME" (⮌) → "REPEAT CONTINUE" (⟲)

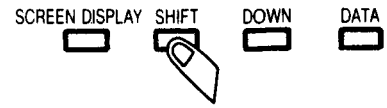


4. Press the SHIFT Button.

The digit to be set will move. The digit is flashing during selection of the desired numeric.

■ This step is activated while "BGN" or "END" is highlighted.

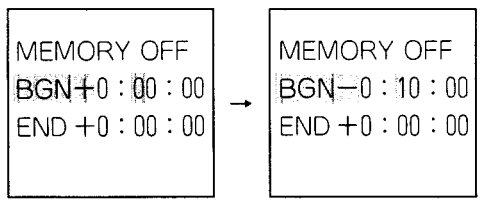


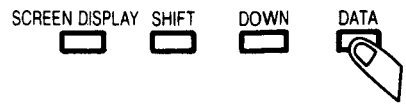


5. Press the DATA Button.

Set the desired numeric and select "+" or "–".

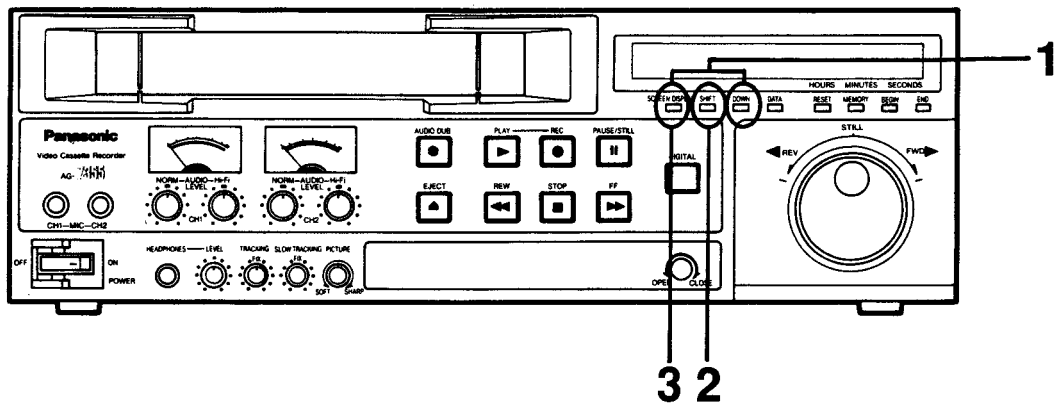
■ This step is activated while "BGN" or "END" is highlighted.





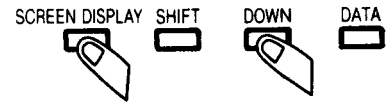
Superimpose display	Description of function
MEMORY OFF	Counter memory is off.
MEMORY STOP	The tape stops at the counter position "0:00:00".
REPEAT 1TIME	Performs one-time REPEAT playback.
REPEAT CONTINUE	Performs continuous REPEAT playback.
BGN	Beginning point of REPEAT playback.
END	End point of REPEAT playback.

ON-SCREEN (Initial Setting)



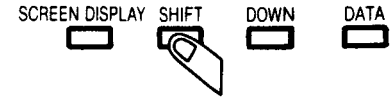
1. Press the DOWN and SCREEN DISPLAY Buttons together.

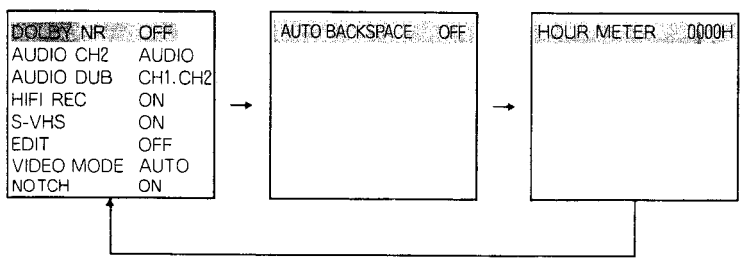
- The unit goes into the ON-SCREEN mode and the initial setting menu will display on the screen.



2. Press the SHIFT Button.

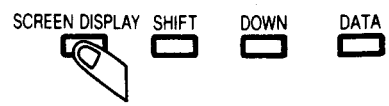
- Each time the SHIFT Button is pressed, the screen will be changed as follows.





3. Press the SCREEN DISPLAY Button after setting is finished.

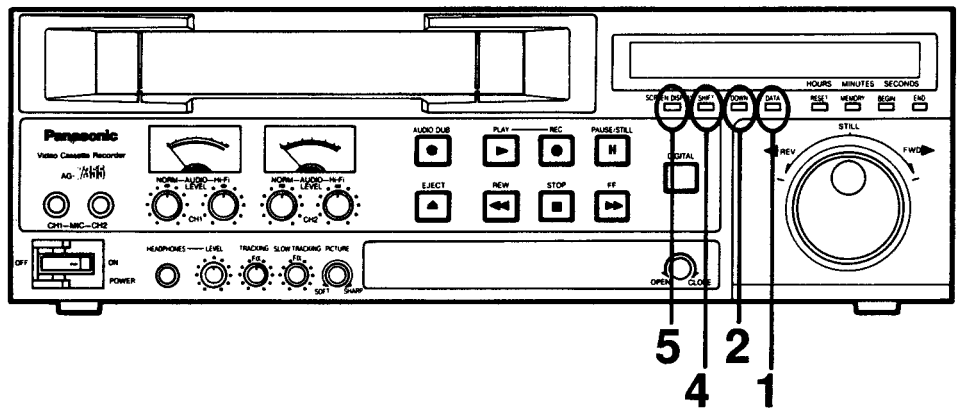
- Normal screen will appear.



Note

- If the SCREEN DISPLAY Button is pressed in the initial setting mode, the screen will return to normal.

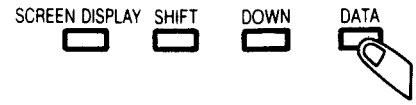
■ **How to set each initial setting item**



1. Press the DATA Button.

■ Select "ON" or "OFF".

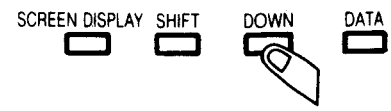
DOLBY NR	OFF
AUDIO CH2	AUDIO
AUDIO DUB	CH1. CH2
HIFI REC	ON
S-VHS	ON
EDIT	OFF
VIDEO MODE	AUTO
NOTCH	ON



2. Press the DOWN Button.

■ The next item will flash.

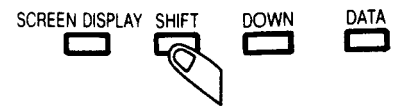
DOLBY NR	OFF
AUDIO CH2	AUDIO
AUDIO DUB	CH1. CH2
HIFI REC	ON
S-VHS	ON
EDIT	OFF
VIDEO MODE	AUTO
NOTCH	ON



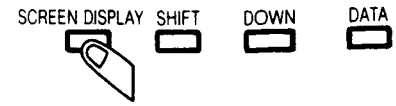
3. Repeat steps 1 and 2 to set each item to the desired mode.

4. Press the SHIFT Button to shift the screen to the next menu.

■ Repeat steps 1 and 2 to set each item mode.



5. Press the SCREEN DISPLAY Button after setting is finished to return to the normal screen.



ON-SCREEN (Initial Setting) (CONT'D)

■ Contents of each initial setting item

DATA Button: To select operation mode
DOWN Button: To move to the next item
SHIFT Button: To shift to next menu screen

<table>
<tr><th>Superimpose</th><th>Description of function</th><th>Initial mode</th></tr>
<tr><td>DOLBY NR</td><td>Sets the DOLBY NR function ON or OFF.
ON: Dolby NR system is activated.
OFF: Dolby NR system is not activated.

■ DOLBY Noise Reduction System
<table><tr><th>PLAY / REC</th><th>ON</th><th>OFF</th></tr><tr><td>**ON**</td><td>Normal sound with less noise.</td><td>Treble is emphasized.</td></tr><tr><td>**OFF**</td><td>Treble is attenuated.</td><td>Normal sound</td></tr></table>*DOLBY NR system is activated when normal audio is reproduced.</td><td>OFF</td></tr>
<tr><td>AUDIO CH2
(When using RS-232C I/F adaptor only)</td><td>Selects the signal to be recorded or played back on audio channel 2.
AUDIO: Audio signal is recorded/played back.
TIME CODE: Time code signal is recorded/played back. (Sound track of channel 2 will be muted.)</td><td>AUDIO</td></tr>
<tr><td>AUDIO DUB</td><td>Selects the audio track CH1 or CH2 for audio dubbing.
CH1: Audio is recorded on channel 1.
CH1, CH2: Audio is recorded on both channels 1 and 2.
CH2: Audio is recorded on channel 2.</td><td>CH1, CH2</td></tr>
<tr><td>HIFI REC</td><td>Sets the Hi-Fi audio recording.
ON: Hi-Fi audio is recorded.
OFF: Hi-Fi audio is not recorded.</td><td>ON</td></tr>
<tr><td>S-VHS</td><td>Sets the recording mode.
ON: Distinguishes between the VHS and S-VHS tapes and determines the recording mode.
OFF: VHS recording is performed.</td><td>ON</td></tr>
<tr><td>EDIT</td><td>Sets the editing mode.
ON: To edit or duplicate tapes (dubbing).
OFF: For normal operation.</td><td>OFF</td></tr>
<tr><td>VIDEO MODE</td><td>Selects the colour mode of video input signal.
COLOUR: Forcibly colour mode.
AUTO: Automatically distinguishes between black & white and colour video input signals.
B&W: Forcibly black & white mode.</td><td>AUTO</td></tr>
<tr><td>NOTCH</td><td>Selects whether to reduce noise or not.
ON: When noise appears during composite input.
OFF: When noise do not appear during composite input.</td><td>ON</td></tr>
<tr><td>AUTO BACKSPACE</td><td>Sets the Auto Backspace function ON and OFF.
ON: The unit rewinds the tape for about 1 second and goes into the PAUSE mode when the REC Button is pressed during the PAUSE/STILL mode or the PAUSE/STILL Button is pressed during recording. Then when the PAUSE/STILL Button is pressed, the unit playbacks the tape for about a secound and goes into the recording mode.
OFF: For normal PAUSE/STILL operation.</td><td>OFF</td></tr>
<tr><td>HOUR METER</td><td>Displays the total of the cylinder driving time.</td><td>0000H</td></tr>
</table>

Error Displays

The following error messages will be displayed on the tape counter if an abnormality occurs in the unit. In this case, follow instructions described below.

Error display	Problem	Remedy
d	Condensation (dew) forms inside the unit.	Wait until "d" goes out with the power on. (Refer to "In case of dew detection".)
E-2	Elevator Lock trouble	Contact your local dealer.
E-3	Loading Lock trouble	Contact your local dealer.
E-4	Cylinder Lock trouble	Contact your local dealer.
E-5	Reel Lock trouble	Contact your local dealer.
E-6	Tension trouble	Contact your local dealer.

Note

- If the error messages except the indication "d" are displayed, turn OFF the unit immediately and disconnect the power cord from the mains to prevent the unit from serious damage before contacting your authorized service personnel.

In case of dew detection

When condensation (dew, so-called sweating) forms inside the unit, the error message "d" will be displayed on the counter and all the operation buttons are made inoperative. Leave the unit on and let it remain at room temperature until "d" disappears. Depending on the surrounding condition, this may take several hours.

Cause of condensation

Condensation forms if warm air comes in contact with a cold object, for example on a window in a well-heated room in winter. It may form if the unit or the video cassette is exposed to sudden changes in temperature and humidity such as may occur when the unit or the video cassette is taken from a cold to a warm place. For instance:

- In a room where the heater has just been turned on in winter;
- In a room with steam or high humidity;
- If the unit or the cassette is brought from cold surroundings into a well-heated room.

Moisture condensation normally occurs gradually. Therefore, there may be cases in which the "d" indicator does not start flashing until 10 or 15 minutes after moisture has begun to condense. In particular, if the temperature or humidity in the room change, wait about 20 minutes before using the unit.

Troubleshooting

Before requesting service, check the following points once again. If the problem is not solved, contact your local dealer.

Problem	Check points	Page
Operation buttons are inoperative.	■ An error message is displayed on the tape counter. ■ The MODE LOCK Selector is set to "ON".	33 12
Recording cannot be performed.	■ The erasure prevention tab on the cassette's rear is broken off. ■ The INPUT Selector is not set correctly.	37 13
Playback picture has large amounts of "snow".	■ Video heads are clogged with dirt or abraded.	38
Noise interference in playback picture.	■ Adjust the TRACKING control.	19
Playback picture is not in colour.	■ The video input signal was originally black & white. ■ The "VIDEO MODE" in the ON-SCREEN (initial setting) menu is set to "B/W".	— 31
Counter does not work.	■ CTL (control) signals are not recorded onto the tape.	—
Playback picture is distorted.	■ Adjust horizontal hold control on the TV monitor. ■ Sudden voltage variations occurred during recording. ■ Tape is old and/or defective.	— — —

Rack Mount Adaptor (Option)

The Rack Mount Adaptor AG-M730-E is used to mount the unit on the IEC standard rack.

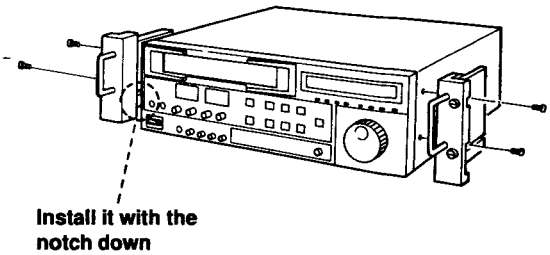
Installation of the AG-M730-E

1. Remove the 4 screws

from the side cabinet of the unit.

2. Use the 4 screws supplied

with the AG-M730-E to install it to the unit.



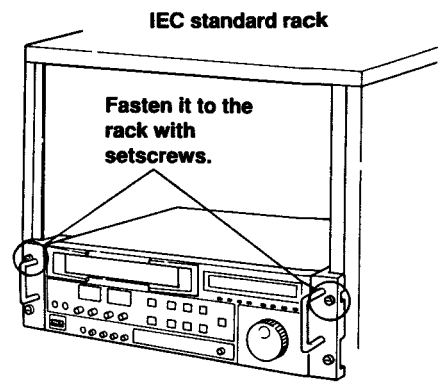
Mounting on the IEC standard rack

1. Remove the 4 rubber legs

from the bottom of the unit.

2. Mount the unit on the rack.

- Be sure to install a ventilation fan (air volume of about 3.3 m 2/sec.) on the top of the rack.

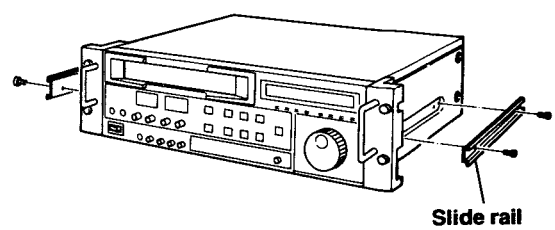


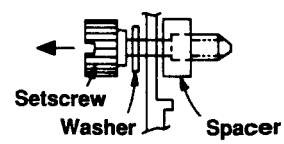
Installation of slide rails

- Use a complete slide rail and bracket unit for 18" length (part No. CC3004-99-0017) or 24" length (part No. CC3004-99-0018) of Chassis Track. (The complete slide rail and bracket unit is not available from Panasonic.)

- When using the slide rail, remove the setscrews. The setscrews can be removed by pulling in the direction of the arrow. Keep the removed setscrews, washers and spacers in a proper place.

- For the details, contact your local dealer.





Connector Signals

S-VIDEO IN/OUT Connectors

Pin No.	Description of signal
1	Y GND
2	C GND
3	Y signal
4	C signal

34P REMOTE Connector

Pin No.	Description of signal
1	REC SWITCH
2	PLAY SWITCH
3	FF SWITCH
4	REW SWITCH
5	STOP SWITCH
6	AUDIO DUB SWITCH
7	PAUSE SWITCH
8	CASSETTE IN
9	AUDIO DUB SWITCH
10	———
11	———
12	GND
13	FRAME ADV. SWITCH
14	REVERSE COUNT
15	———
16	EDIT WITCH
17	REVERSE
18	CONTROL PULSE OUT
19	REMOTE 19
20	START MARK
21	EJECT SWITCH
22	———
23	REC HOLD
24	PLAY HOLD
25	FF HOLD
26	REW HOLD
27	———
28	AUDIO DUB HOLD
29	PAUSE HOLD
30	REMOTE 30
31	AUDIO DUB HOLD
32	———
33	REMOTE 33
34	+ 12 V

Accessories

Standard Accessories

- **34P Interface Adaptor** . . . . . .Mounted on the unit
- **Power Cord**
- **S-VIDEO cable (4P)**

Optional Accessories

- **Remote Controller** . . . . . .Model No. AG-A600
- **4P S-VIDEO Cable** . . . . . .Model No. AG-C71A (5m)
  Model No. AG-C70A (3m)
- **Rack Mount Adaptor** . . . . . .Model No. AG-M730-E
- **RS-232C Interface Adaptor** . . . . . .Model No. AG-IA232TC

Cassette Tapes

- **S-VHS Video Cassettes**
- **VHS Video Cassettes**

Note

- Model AG-7355 cannot be connected to an editing controller. Therefore, this unit cannot be used as a source unit in an editing system.
  - If the search dial is turned too suddenly when the unit is employed with an editing controller, the unit may not be able to track the dial's setting.
  - Use of the AG-7650 is recommended in cases where editing accuracy is required of the source unit.

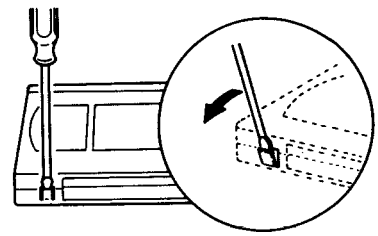
Notes For Video Cassette

Notes for use

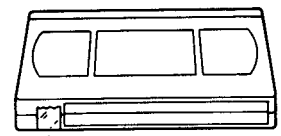
- Unlike audio cassettes, video cassettes may be used on only one side.
- The tape runs from left to right and stops when it reaches the end. When the tape becomes fully wound on the right reel, rewind before using again.
- Do not insert and remove the video cassette in and from the cassette holder repeatedly without getting the tape run to prevent the tape from being loose and damaged.

To prevent accidental erasure

Break off the erasure prevention tab on the cassette. After it has been removed, the tape cannot be used for recording.



To record again on a cassette with the tab removed, simply cover the hole with adhesive tape.



Block the hole with tape.

Notes for handling

Condensation may form on the tape if the video cassette is exposed to sudden changes in temperature and humidity such as may occur when it is taken from a cold to a warm place. In this case, let it remain at room temperature until the condensation evaporates to prevent the tape from damage. Depending on the surrounding condition, this may take about 2 hours.

- Do not touch the tape surface.
- Never subject the cassette to shock or strong vibrations.
- Cassettes are precision-made devices. Do not disassemble them.
- Do not dry condensed tape with a hair dryer, or similar appliance.

Notes for storage

- After use, be sure to fully rewind the tape to the beginning on the left reel.
- Store the cassettes vertically in their cases.
- The cassette should never be stored in the following places:
  - near strong magnetic fields such as generated by a power transformer, electric motor, and magnets, etc.;
  - in extremely damp or dusty places;
  - exposed to direct sunlight or near sources of heat;
  - in a closed automobile.

Regular Inspections

Head cleaning

If the screen should appear as shown below, it means that the video heads are dirty. It is recommended that you clean the heads periodically. Use the optional cleaning tape and special purpose cleaning fluid to clean the heads. Consult with your dealer if the symptoms should persist even after cleaning.

- Repeated head cleaning will shorten the service life of the video heads.
- Nothing can be recorded on the head cleaning tape.
- If you use cleaning fluid, wipe the cleaned heads with a dry cloth before using the unit.

Manitenance

Before proceeding with maintanance, set the power switch to OFF and, remembering to take hold of the power plug, disconnect it from the power outlet.
Use a soft cloth to clean the cabinet. With stubborn stains or dirt, dilute some dish washing liquid, allow a cloth to soak in it, and then wring it out and clean. After having removed the stains or dirt, use a dry cloth to wipe away any moisture.
Do not use paint thinners or benzine.

Storage

- Avoid storing the unit in a location where the temperature is by extremely high or low.
- Under no circumstances should the unit be left outdoors.
- If there are no plans to use the unit for a prolonged period of time, set the power switch to OFF and, remembering to take hold of the power plug itself, disconnect it from the power outlet. This is done to safeguard against accidents and breakdowns.
- Before storing, always remember to remove the cassette tape if one is still inside the unit.

Specifications

General

Power Supply:	120-240V AC, 50-60Hz
Power Consumption:	59W

is the safety information.

Recording System:	2 head-helical scanning, azimuth recording, S-VHS/VHS standards
Tape Speed:	23.39mm/s
Tape Format:	S-VHS tape, VHS tape
Recording Time:	180 minutes (with NV-E180)
Playback Time:	180 minutes (with NV-E180)
FF/REW Time:	About 2 minutes (with NV-E180)
Heads:	Video; 4 rotary heads Audio; 2 rotary heads (Hi-Fi 2ch) Audio/control; 1 stationary head (Normal Audio) Erase; 1 full track erase
Operating Humidity:	35% to 80%
Operating Temperature:	5°C to 40°C (during operation)
Dimensions:	424 mm (W) × 131.5 mm (H) × 424 mm (D)
Weight:	Approx. 11.2 kg

Video

Television Format:	CCIR Standard (625 lines, 50 fields) PAL colour signal EIA (525 lines, 60 fields) 4.43 MHz modified NTSC colour signal	
Input/Output:	Line (BNC);	1.0Vp-p, 75Ω unbalanced
	S-Video (4P);	Y: 1.0Vp-p, 75Ω unbalanced C: 0.3Vp-p, burst level 75Ω unbalanced
Horizontal Resolution:	VHS;	B/W: 300 lines/colour: 240 lines
	S-VHS;	Over 400 lines (B/W, colour)
S/N Ratio:	VHS;	45dB (B/W) 45dB (colour)

Audio

Input:	Line (phono);	–8dBv, 47kΩ unbalanced
	Mic (1/4");	–60dBv, 4.7kΩ unbalanced
Output:	Line (phono);	–8dBv, 600Ω unbalanced
	Monitor (phono);	0dBv, 600Ω unbalanced
	Headphones (1/4");	–60dBv~–20dBv, 8Ω unbalanced
Track number:	4 tracks (Normal: 2, Hi-Fi: 2)	
S/N Ratio:	48dB (Normal Audio: Dolby NR ON)	
Hi-Fi Dynamic Range:	90dB	
Frequency Response:	50Hz to 12kHz (Normal Audio) 20Hz to 20kHz (Hi-Fi sound)	

*1Vrms=0dBv

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.